

# Investigation Report

## Department of Health

### Clean Water Branch

ID #: PA0991D

Date of investigation: 1/13/2011

Page 1 of 3

Permit/File/WQC No: R50A533

Island: Oahu

Facility: Waste Management Hawaii/CCH

#### Complaint/Background Description:

On January 13, 2011, the Department of Health (DOH), Clean Water Branch (CWB), conducted an inspection of the Waimanalo Gulch Sanitary Landfill (Landfill). The inspection was conducted in conjunction with representatives from the DOH, Solid and Hazardous Waste Branch (SHWB), and the US Environmental Protection Agency (EPA). The inspection was conducted in response to a significant rain event which occurred between January 12, 2011, and January 13, 2011 and the Landfill's ongoing problem with the E6 cell. Matthew Kurano represented the DOH-CWB, Wendy Wiltse represented the US Environmental Protection Agency (EPA), Jose Ruiz and Tom Miyashiro from the DOH-SHWB were present during the inspection of the Landfill. Joe Whelan and Jesse Frey of Waste Management Hawaii were present at the Landfill during the inspection.

#### Permit History

The CCH, Refuse Division, owns the Landfill and has National Pollutant Discharge Elimination System (NPDES) permit coverage through a general permit authorizing the discharge of storm water associated with industrial activities from the Landfill to State waters. The Landfill's Notice of General Permit Coverage (NGPC), File No. HI R50A533, only authorizes the discharge of storm water discharges associated with industrial activities that will not cause or contribute to a violation of applicable State water quality standards and comply with permit effluent limitations. Discharges of effluent, leachate, or solid waste are not permitted by the issued NGPC.

#### Findings Description:

The weather was mostly cloudy throughout the inspection. Heavy rain had preceded the inspection. The following findings were either observed or noted before, during or after the inspection:

- 1) ☐ Previous inspections of the Landfill addressing storm water issues associated with the E6 cell are documented in Investigation Reports, ID#s PA0991, PA0991A, PA0991B and PA0991C.
- 2) ☐ At approximately 12:15 pm, representatives from the DOH-CWB and EPA, met DOH-SHWB representatives at the Landfill. Upon arrival, DOH-CWB and DOH-SHWB representatives observed solid waste accumulated on the Landfill's detention basin berm (Photograph 1) as well as in the area between the detention basin and Farrington Highway (Photograph 2). At approximately 12:20 pm, a heavy flow of highly turbid water was observed in Landfill's concrete lined channel (Photograph 3). The source of the heavy flow observed was unknown at the time of inspection.
- 3) ☐ After observations of the Landfill's detention basin were made, J. Whelan was questioned about how the Landfill fared in the overnight rain event and specifically about the current condition of the E6 cell. J. Whelan stated that he believed no solid waste was exposed in the E6 cell as a result of the rain event experienced on January 12-13, 2011. J. Whelan stated that he believed that all of the sediment flowing down Waimanalo Gulch added an additional layer of cover material in the E6 cell. After speaking with J. Whelan, J. Frey escorted representatives from the EPA, DOH-CWB and DOH-SHWB to the E6 cell.
- 4) ☐ At the time of inspection, the E6 cell was completely flooded with storm water. The berm located on the south side of the E6 cell (Photograph 4) was being augmented at the time of inspection. J. Frey stated that Goodfellow Bros. construction crews were adding material to the berm to dam the storm water that had flooded the E6 cell (Photograph 5). A small accumulation of solid waste was observed on the south side of the E6 cell. The lack of floatables and sludge contrasted observations made during previous inspections conducted after flooding of the E6 cell. During the January 4, 2011 inspection, a larger layer of sludge-like material and floatables was observed in the E6 cell.

# Investigation Report

## Department of Health

### Clean Water Branch

ID #: PA0991D

Date of investigation: 1/13/2011

Page 2 of 3

5) Based on the high water mark observed on the berm/dam, the water level in the E6 cell had come within approximately one (1) foot of topping the berm at its highest level (Photograph 4). At the time of inspection, the water level in the E6 cell appeared to have decreased approximately two (2) feet below the high water line. It was unclear how the water level in the E6 cell could have dropped so rapidly.

6) M. Kurano questioned J. Frey about the status of the "Hobas" pipe opening that was located on the southwest side of the E6 cell. J. Frey stated that the opening of the "Hobas" pipe was closed to prevent the discharge of any of the impounded water in the E6 cell. J. Frey stated that there had been no discharges from the E6 cell since December 23, 2010, when the Landfill was notified that discharges from the E6 cell were violations of Hawaii Water Pollution rules and regulations. J. Frey stated that nothing was discharged from the E6 cell and that he had inspected the shoreline area and had seen no solid waste.

7) After inspecting the Landfill's E6 cell, the Landfill's shoreline outfall (Photograph 6) and receiving water (Photograph 7) was inspected. A significant amount of solid waste material was observed in the area (Photograph 8) immediately north of the outfall. The solid waste observed in the area north of the outfall appeared to be recently deposited. Various solid wastes such as plastic bottles were observed. The plastic bottles were clear and did not appear to have been weathered for an extended period of time. Within the solid waste observed immediately north of the Landfill's outfall, medical waste such as syringes, needles (Photograph 9), and medicine bottles were observed. Solid waste was also observed in the tree branch located within the flow path of the Landfill's outfall (Photograph 10). The solid waste deposited in the tree branch included syringes and various other solid wastes. During the inspection of the Landfill's outfall area, representatives from the Ko Olina resort arrived at the Landfill's outfall.

8) Eddie Belluomini, Operations Manager for Ko Olina Operations, stated that on the morning of January 13, 2011, Ko Olina personnel found a significant amount of debris and medical waste in Ko Olina's lagoons and the area immediately south of Lagoon 4 (Photograph 11). E. Belluomini stated that at approximately 7:00 am on January 13, 2011, Ko Olina staff conducted a routine shore patrol and reported finding medical waste. E. Belluomini stated that Ko Olina staff started raking the lagoon areas in response to finding the medical waste and that the lagoons had been closed. E. Belluomini stated that finding medical waste at Ko Olina had not happened before during his tenure at Ko Olina. E. Belluomini provided the DOH-CWB with two (2) gallon sized bags of medical waste that was collected at or around the Ko Olina shoreline on January 13, 2011.

9) DOH and EPA observed significant amounts of debris and medical waste in and around the south side of Lagoon 4 (Photograph 12) at the time of inspection.

10) After observing medical waste and other solid waste in the shoreline area around the Landfill's outfall as well as in and near Ko Olina's Lagoon 4, EPA and DOH-CWB representatives went back to the Landfill. Upon arrival at the Landfill, the Landfill's detention basin berm (Photograph 13) was closely inspected. The solid waste deposited on the detention basin's berm included bags labeled "biohazard" (Photograph 14), used intravenous fluids bags (Photograph 15), hypodermic needles (Photograph 16) and syringes, bags that appeared to be autoclaved medical waste, various other medical wastes and other assorted solid waste. The solid waste collected in the area between the Landfill's berm and Farrington Highway (Photograph 17) was of similar composition as to what was observed on the berm of the Landfill's detention basin (Photograph 18). A Waste Management Hawaii worker was actively collecting the solid waste on the Landfill's berm. The worker stated that he was finding medical waste throughout the solid waste on the Landfill's berm.

11) J. Whelan was present during the inspection of the Landfill's berm. J. Whelan confirmed that the medical waste observed by EPA and DOH-CWB representatives was medical waste and that the medical waste came from the Landfill. J. Whelan would not definitively note the exact origin within the Landfill of the solid waste but acknowledged that the solid waste did come from the Landfill.

12) Chris Sprague from the CCH arrived at the Landfill at approximately 4:10 pm. C. Sprague stated that he was

# Investigation Report

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### Clean Water Branch

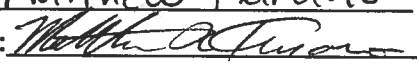
ID #: PA0991D

Date of investigation: 1/13/2011

Page 3 of 3

directed to "take samples" and that he would be posting warning signs near the receiving waters. Until CCH posted warning signs on the afternoon of January 13, 2011, there was no signage warning beachgoers of the discharges.

In conclusion, it appears that the Landfill discharged solid waste from the Landfill's detention basin to State waters. The solid waste included medical waste. The discharge appeared to have occurred prior to the initial arrival of DOH-CWB and EPA representatives to the Landfill. It was unclear as to how or why the solid waste was discharged at the time of inspection. The discharge of solid waste to State waters is a violation of Hawaii Water Pollution rules and regulations.

Name: Matthew Kurano  
Signature:   
Title: EHS  
Date: Feb 8, 2011

Name: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_



Photograph # 1

Date: January 13, 2011

Observers: Matthew Kurano and Wendy Wiltse

Location: 92-460 Farrington Highway, Kapolei, Hawaii

Description: View of the Landfill's detention basin berm (Red Arrow). Debris and solid waste was observed on the berm of the detention basin.



Photograph # 2

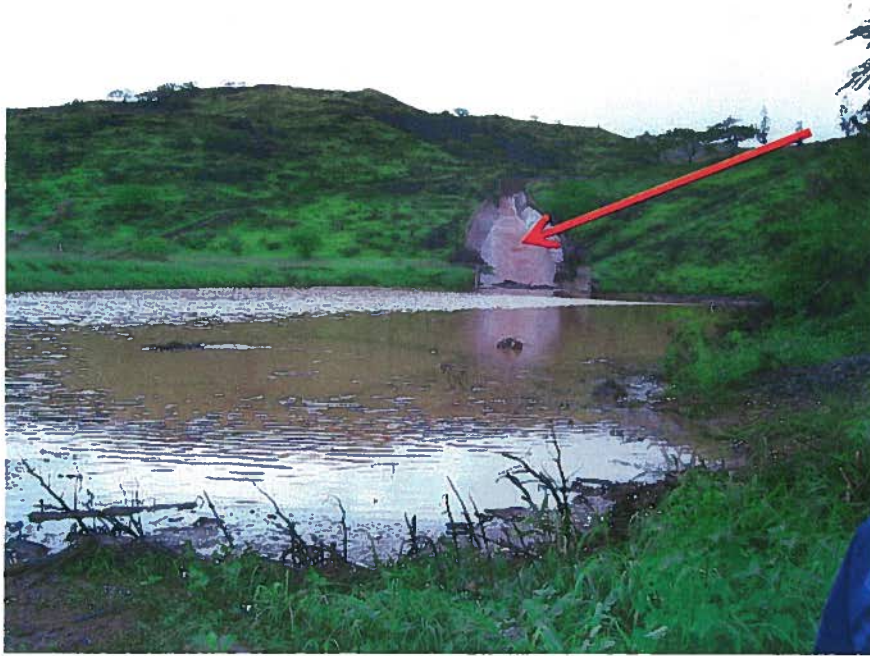
Date: January 13, 2011

Observers: Matthew Kurano and Wendy Wiltse

Location: 92-460 Farrington Highway, Kapolei, Hawaii

Description: View of the detention basin between Farrington Highway and the detention basin's berm. A significant amount of solid waste was observed in the area between the Landfill's detention basin and Farrington Highway. Solid waste was observed on the top and side of the detention basin's berm which indicated that the berm was overtopped and released solid waste to the Landfill's drainage system.





Photograph # 3

Date: January 13, 2011

Observers: Matthew Kurano and Wendy Wiltse

Location: 92-460 Farrington Highway, Kapolei, Hawaii

Description: View of an unknown flow (Red Arrow) into the Landfill's detention basin. A heavy flow into the detention basin was occurring at the time of inspection.



Photograph # 4

Date: January 13, 2011

Observers: Matthew Kurano, Wendy Wiltse

Location: 92-460 Farrington Highway, Kapolei, Hawaii

Description: View of the south side of the E6 cell. An earthen berm was acting as a dam and containing the contaminated storm water that inundated the E6 cell. The "Hobas" pipe opening (Red Arrow) is located on the southwest side of the E6 cell.



Photograph # 5

Date: January 13, 2011

Observers: Matthew Kurano and Wendy Wiltse

Location: 92-460 Farrington Highway, Kapolei, Hawaii

Description: View of the E6 cell facing north. The entire E6 cell was flooded at the time of inspection.



Photograph # 6

Date: January 13, 2011

Observers: Matthew Kurano, Wendy Wiltse

Location: Landfill Outfall, Kapolei, Hawaii

Description: View of the Landfill's shoreline outfall (Red Circle) at the time of inspection. Turbid discharges were observed at the time of inspection. Solid waste was observed in the tree branch directly in front of the Landfill's outfall (Red Arrow).





Photograph # 7

Date: January 13, 2011

Observers: Matthew Kurano and Wendy Wiltse

Location: Landfill Outfall, Kapolei, Hawaii

Description: View of the receiving water in front of the Landfill's outfall. Solid waste (Red Arrow) accumulated in the area immediately north of the outfall.



Photograph # 8

Date: January 13, 2011

Observers: Matthew Kurano, Wendy Wiltse

Location: North of Landfill Outfall, Kapolei, Hawaii, Kapolei, Hawaii

Description: View of the accumulated solid waste (Red Arrow) in the area immediately north of the outfall. The solid waste appeared to be from a land based source. The waste included plastic bottles, various solid waste, and medical waste.



Photograph # 9

Date: January 13, 2011

Observers: Matthew Kurano and Wendy Wiltse

Location: North of Landfill Outfall, Kapolei, Hawaii

Description: View of a syringe and hypodermic needle observed in the solid waste which accumulated in the area immediately north of the Landfill's outfall.



Photograph # 10

Date: January 13, 2011

Observers: Matthew Kurano, Wendy Wiltse

Location: Landfill Outfall, Kapolei, Hawaii

Description: View of the solid waste accumulated in the tree branch in front of the Landfill's outfall. Same tree branch as pictured in Photograph 6. Solid waste included medical waste such as syringes with hypodermic needles still attached.





Photograph # 11

Date: January 13, 2011

Observers: Matthew Kurano and Wendy Wiltse

Location: South of Lagoon 4, Ko Olina, Kapolei, Hawaii

Description: View of solid waste and debris which had accumulated immediately south of the Ko Olina Lagoon 4.



Photograph # 12

Date: January 13, 2011

Observers: Matthew Kurano, Wendy Wiltse

Location: South of Lagoon 4, Ko Olina, Kapolei, Hawaii

Description: View of the solid waste accumulated immediately south of the Ko Olina Lagoon 4. The solid waste included general debris as well as medical waste (Red Arrow).





Photograph # 13

Date: January 13, 2011

Observers: Matthew Kurano and Wendy Wiltse

Location: 92-460 Farrington Highway, Kapolei, Hawaii

Description: View of solid waste which had accumulated on the Landfill's detention basin berm on January 13, 2011. The solid waste included general debris and medical waste.



Photograph # 14

Date: January 13, 2011

Observers: Matthew Kurano, Wendy Wiltse

Location: 92-460 Farrington Highway, Kapolei, Hawaii

Description: View a specimen bag labeled "Biohazard" which was observed on the Landfill's detention basin berm. There were many similar bags of medical waste on the berm at the time of inspection.





Photograph # 15

Date: January 13, 2011

Observers: Matthew Kurano and Wendy Wiltse

Location: 92-460 Farrington Highway, Kapolei, Hawaii

Description: View of an IV bag and a other waste observed on the Landfill's detention basin berm.



Photograph # 16

Date: January 13, 2011

Observers: Matthew Kurano, Wendy Wiltse

Location: 92-460 Farrington Highway, Kapolei, Hawaii

Description: View of a bag of syringes and needles. The bag was observed on the Landfill's detention basin berm.





Photograph # 17

Date: January 13, 2011

Observers: Matthew Kurano and Wendy Wiltse

Location: 92-460 Farrington Highway, Kapolei, Hawaii

Description: View of solid waste, including medical waste, discharged from the Landfill's detention basin. The solid waste pictured was located in the area between the Landfill's detention basin berm (Red Arrow) and Farrington Highway.



Photograph # 18

Date: January 13, 2011

Observers: Matthew Kurano, Wendy Wiltse

Location: 92-460 Farrington Highway, Kapolei, Hawaii

Description: View of a ruptured bag of what appeared to be medical waste observed between the Landfill's detention basin and Farrington Highway. The ruptured bag appeared to be one of the red colored medical waste bags that appeared to be autoclaved prior to disposal at the Landfill.



Image 1

Location: 92-460 Farrington Highway, Kapolei, Hawaii

Description: View of the Landfill (Red Oval). Discharges from the Landfill enter into State waters at a shoreline outfall (Red Arrow) located southwest of the Landfill. Solid waste, including medical waste, was observed in the area adjacent to the outfall as well as throughout Ko Olina's four (4) lagoons. A heavy concentration of solid waste (Red Dot) was observed outside of Ko Olina's Lagoon 4.



I certify that the eighteen (18) attached photos described above were taken by the undersigned and are a true, accurate, and unaltered representation of what was observed on January 13, 2011 at and around the Waimanalo Gulch Sanitary Landfill, 92-460 Farrington Highway, Kapolei, Hawaii.



Matthew R. Kurano

Feb 8, 2011

Date